

2. *On South African Coccinellidae, species incertae.* By H. ANDREAE, D.Sc., Hon. Curator of Coleoptera, South African Museum.

Coccinella gibba Thunb., *Nov. Spec. Ins.* I, 1781, p. 13, f. 14, from the Cape, is cited in W. Junk's *Coleopterorum Catalogus*, pars. 118, p. 67, as *Epilachna incertae sedis*. Crotch has already remarked (*Revis. Cocc.* 1874, p. 9): 'Little or no reliance can be placed on the localities' in this publication. Yet there is a South African species which agrees with Thunberg's description in so far that all the characters given are within its limits of variation, although exactly the same combination is not found in the specimens in the South African Museum collection. The main points are:

Light brownish red, metasternum black, prothorax with a median black spot, elytra with six black spots each, two basal, three median, forming an arcuate band, one towards the apex near the suture; 5-8 mm. The figure shows no spot on the prothorax and a straight band narrowed in two places, widened in three.

Out of sixteen specimens which I refer to *gibba*, six have a spot on the prothorax, one has the median spots (3, 4, 5) connected, one has the normal spots 6 and 8 missing (8 alone is missing in 8), the metasternum alone is black or fuscous in 7, in the others either some abdominal segments are infuscated at the base or the whole underside is red. 5.5-7.5 mm. Cape: Douglas; Transvaal: Potchefstroom, Pretoria, Pietersburg, Lydenburg, Zoutpansberg.

In the Transvaal specimens, spots 1, 2 or 1, 2, 5, sometimes also 6, 7 or 6, 7, 8, are connected, the elytra showing a design like *E. hirta* ab. *caesarea* Sic., but head and prothorax are red.

J. Weise describes (*Deutsche Ent. Zeitschr.* 1888, p. 83) a form from the Kwango, northern Angola, in which spots 1 and 2 are also connected, forming a dentate band from one humeral callus to the other; he stated that *E. hirta* Thunb. var. *invalida* Muls. gradually changes into var. *insidiosa* Muls., therefore he gave no names to the intermediate forms. *E. gibba* Thunb. apparently differs from var. *invalida* Muls. only by elytral spots 3, 4, 5 connected, 6 and 8 missing, central spot on the prothorax and metasternum black. As it is a very variable species, the definition should be amended.

Light brownish red, prothorax with or without median black spot, elytra red with 8 black spots (2, 3, 2, 1), 1, 2 or 1, 2, 5 or 3, 4, 5, sometimes also 6, 7 or 6, 7, 8, connected, 8 or 6 and 8 may be missing. Underside red, metasternum mostly black or fuscous, abdominal segments often infuscate at the base.

E. gibba Thunb. therefore comprises the specimens with red head and prothorax so far placed in *ab. discors* Muls. and *caesarea* Sic. (both have head and prothorax black), and *invalida* Muls. with connected elytral spots and dark metasternum.

As *E. gibba* (p. 13) has preference, *E. hirta* (p. 23) becomes a subspecies.

Key to the South African forms

1''	Head and prothorax red.	subsp. <i>gibba</i>
2''	Elytra red with black markings (2, 3, 2, 1), (2, 3, 2) or (2, 3, 1).	
3''	Some elytral spots connected, metasternum mostly black or fuscous, abdominal segments often infusate at base.	<i>gibba</i> f. typ.
3'	All the spots free, underside red, only sides of metasternum and spots on abdominal segments sometimes infusate.	ab. <i>invalida</i>
2'	Elytra black with free or connected yellowish markings (1, 2, 2, 1), basal and apical lunulate, others rounded or subquadrate.	
4''	Markings 1, 2 or 1, 2, 3 or 1, 2, 3, 1 connected.	ab. <i>peringueyi</i>
4'	All the markings free.	ab. <i>insidiosa</i>
1'	Head and prothorax black.	subsp. <i>hirta</i>
5''	Elytra like 2'.	
6''	Markings 1, 2, 3 free or connected, 4, 5, 6 free. (Ab. 12- <i>verrucata</i> F. may belong here; description not available.)	<i>hirta</i> f. typ.
6'	Markings 4, 5 forming a transverse band, the others free.	ab. <i>guttatofasciata</i>
5'	Elytra like 2''.	
7''	Spots 1, 2, 5 connected, the others free, 8 (and 6) sometimes missing.	ab. <i>caesarea</i>
7'	All the spots free, or others than 2 and 5 connected.	ab. <i>discors</i>

Of the other species described from the Cape in the same paper and not identified so far, *C. trinotata*, p. 11, fig. 11, may be identical with or closely allied to *Martinella justitiae* Gorh. from Natal; the descriptions agree fairly well, except that in the type of *justitiae* the suture is partly black and the three spots are united into one patch. Of the two specimens in the South African Museum, the male agrees completely with the description while the female has no black suture, only a triangular patch with rounded angles and concave sides indicating that it is formed from three spots. So far no specimen with free spots has been recorded.

C. oculata, p. 14, fig. 18, and *C. lunata*, p. 19, fig. 28, are probably not from South Africa; *lunata* might be a *Cyrtocaria* (Madagascar).

In *Germ. Mag. Ent.*, IV, 1821, p. 183, Wiedemann described *C. erythrochila* from the Cape, collected by the Rev. Hesse, Cape Town, which has not been recorded again. The author compares it with two species of *Exochomus*, *auritus* (*flavipes*) and *haemorrhoidalis*, but points out that the scutellum is much larger and the fine punctation of the elytra almost striate. The coloration is very peculiar: aeneous, sides of prothorax and elytra with a broad, reddish-yellow margin.

To this species I refer a specimen in the collection of the South African Museum from Jakkalswater, Bushmanland, coll. R. M. Lightfoot, Oct. 1911,

although it is smaller (3 mm. instead of 2 lines) and the last abdominal segment as well as the legs (except the posterior side of the femora) is testaceous. These differences I take to be sexual, the type being a female and the present specimen a male. It is a *Hyperaspis* allied to *H. pumila* Muls. but without yellow spot on the disc of the elytra, the testaceous margin twice as broad at the shoulder, widened towards the apex and terminated by the apical patch which is just indicated by a slight widening of the rounded end.